IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

LAMPORT	Group Art Unit: Unassigned
Application No. Unassigned	Examiner: Unassigned
Filed: December 30, 2003	
For: SIMPLIFIED PAXOS	

Certificate of Mailing Under 37 CFR 1.10

I hereby certify that this INFORMATION DISCLOSURE STATEMENT and all accompanying documents are being deposited with the United States Postal Service "Express Mail Post Office To Addressee" Service, Express Mail Label No. EV 329735559 US, under 37 CFR 1.10 on the date indicated below and is addressed to: Mail Stop Patent Application, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

12/30/03

Date

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

☒   **within** any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.

☐   **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of:

    ☐   the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
or
    ☐   the fee of $180 set forth in 37 CFR 1.17(p) (see "Fees" below).

☐   **after** the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of $180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

☐   **after** the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and **within** thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of $180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

Copies of the References

☒   Copies of the references listed on the enclosed Form 1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an

English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).

☐ A copy of the foreign search report is enclosed herewith.

☐ The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status *(check one)*		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

Statement under 37 CFR 1.97(e)

☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.

☐ The **undersigned** hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

Statement under 37 CFR 1.704(d)

☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

3

Fees

☒   **No fee** is owed by the applicant(s).
☐   The **IDS Fee of $180** under 37 CFR 1.17(p) is enclosed herewith.
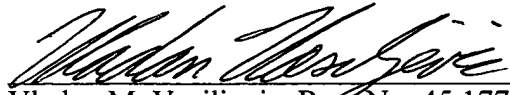

Method of Payment of Fees

☐   Attached is a check in the amount of $.
☐   Charge Deposit Account No. 12-1216 in the amount of $. (A duplicate copy of this communication is enclosed for that purpose.)

Authorization to Charge Additional Fees

☒   If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

Instructions as to Overpayment

☒   Credit Account No. 12-1216.
☐   Refund

Vladan M. Vasiljevic, Reg. No. 45,177
LEYDIG, VOIT & MAYER, LTD.
Two Prudential Plaza, Suite 4900
180 North Stetson
Chicago, Illinois 60601-6780
(312) 616-5600 (telephone)
(312) 616-5700 (facsimile)

Date: December 30, 2003

IDS (Revised 5/21/03)

Substitute for form 1449A/B/PTO **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** *(Use as many sheets as necessary)*				**Complete if Known**	
				Application Number	Unassigned
				Filing Date	December 30, 2003
				First Named Inventor	Lamport
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	1	of	3	Attorney Docket Number	224006

U.S. PATENT DOCUMENTS

Examiner Initials	Doc. No.	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
		Application or Patent Number	Kind Code			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Doc. No.	Foreign Patent Document			Name of Patentee or Applicant	Date of Publication	Translation	
		Office	Application or Patent Number	Kind Code			Yes	No*+

OTHER - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No*+
	A A	LAMPORT, Leslie, "Time, Clocks, and the Ordering of Events in a Distributed System", *Communication of the ACM*, 21(7):558-565, July 1978		
	A B	LAMPORT, Leslie, "The Part-Time Parliament", *ACM Transactions on Computer Systems* 16, 2 (May 1998), pp. 133-169. Also appeared as SRC Research Report 49		
	A C	LAMPORT, Leslie, "Paxos Made Simple", *ACM SIGACT* News (Distributed Computing Column), 32,4 (Whole Number 121, December 2001) pp. 18-25		
	A D	LAMPSON, Butler W., "The ABCD's of Paxos", Presented at *Principles of Distributed Computing*, 2001, as one of the papers celebrating Leslie Lamport's 60th Birthday, retrieved from http://research .microsoft.com/lampson/65-ABCDPaxos/Acrobat.pdf		
	A E	CASTRO, Miguel, et al., "Practical Byzantine Fault Tolerance", appears in *Proceedings of the Third-Symposium on Operating Design and Implementation*, New Orleans, USA, February 1999, pp. 1-14		
	A F	CASTRO, Miguel, et al., "Proactive Recovery in a Byzantine-Fault-Tolerant System", appears in the *Proceedings of the Fourth Symposium on Operating Systems Design and Implementation* (OSDI '00), San Diego, USA, October 2000, pp. 1-15		
	A G	HUANG, Yennun, et al., "Software Rejuvenation: Analysis, Module and Applications", *Proc. International Symposium on Fault Tolerant Computing*, pp. 381-390, (1995)		
	A H	BRACHA, Gabriel, "An asynchronous $\lfloor(\eta -1)/3\rfloor$-resilient consensus protocol" this paper was presented at the *ACM Symposium on Principles of Distributed Computing* 1984, pp. 154-162		
	A I	KEIDAR, Idit, et al., "Moshe: A Group Membership Service for WANs" to appear in *ACM Transactions on Computer Systems (TOCS)*, August 2002, pp. 1-47		

	A J	KHAZAN, Roger, I., "A One-Round Algorithm for Virtually Synchronous Group Communication in Wide Area Networks", PH.D. dissertation, Department of Electrical Engineering and Computer Science. MIT., May 22, 2002. Thesis Supervisors: Prof. Nancy A. Lynch and Dr. Idit Keidar. Retrieved from http://theroy.1cs.mit.edu/~roger/Research/Papers /khazan-phd.pdf		
	A K	ANCEAUME et al., "Converging Toward Decision Conditions" 6th International Conference on Principles of Distributed Systems, France, pp. 53-63 (December 11-13, 2002)		
	A L	MOSTEFAOUI et al., "IRISA Research Report Number 1355" (October 2000)		
	A M	BRASILEIRO et al., "IRISA Research Report Number 1321" (April 2000)		
	A N	Schneider, F.; *Implementing Fault-tolerant Services Using the State Machine Approach: A Tutorial*; Computing Surveys, 22(3):299–319, September 1990.		
	A O	Deswarte, Y. et al; *Intrusion Tolerance in Distributed Computing Systems*; Proceedings of the 1991 IEEE Symposium on Research in Security and Privacy; pp. 110-121, May 1991.		
	A P	Canetti, R. et al.; *Fast asynchronous Byzantine agreement with optimal resilience*; Proc. 25th Annual ACM Symposium on Theory of Computing (STOC), pp. 42–51, 1993.		
	A Q	Reiter, M; *How to Securely Replicate Services*; ACM Transactions on Programming Languages and Systems, Vol. 16, No. 3, pp. 986-1009, May 1994.		
	A R	Reiter, M. K.; *Secure Agreement Protocols: Reliable and Atomic Group Multicast in Rampart*; Proceedings of the 2nd ACM Conference on Computer and Communications Security, pages 68-80, Fairfax, Virginia, November 1994.		
	A S	Gong, L. et al.; *Byzantine Agreement With Authentication: Observations and Applications in Tolerating Hybrid and Link Faults*; Dependable Computing for Critical Applications – 5, pages 79-90, IFIP WG 10.4, preliminary proceedings, 1995.		
	A T	Reiter, M. K.; *The Rampart toolkit for building high-integrity services*; Theory and Practice in Distributed Systems, International Workshop, Selected Papers, Lecture Notes in Computer Science, vol. 938, K. P. Birman, F. Mattern, and A. Schiper, Eds., Springer-Verlag, Berlin, 99–110, 1995.		
	A U	Reiter, M. K.; *Distributing Trust With the Rampart Toolkit*; Communications of the ACM; 39, 4 pp. 71-74, April 1996.		
	A V	Malkhi, D. et al.; *A High-Throughput Secure Reliable Multicast Protocol*; Proceedings of the 9th Computer Security Foundations Workshop, Kenmore, Ireland, pp. 9-17, June 1996.		
	A W	Malkhi, D. et al.; *A High-Throughput Secure Reliable Multicast Protocol*; Journal of Computer Security. Also in Proceedings of the 9th IEEE Computer Security Foundations Workshop, pages 9-17, June 1996.		
	A X	Malkhi, D. et al.; *Byzantine Quorum Systems*; Proceedings of the 29th ACM Symposium on Theory of Computing, May 1997.		
	A Y	Malkhi, D. et al.; *The Load and Availability of Byzantine Quorum Systems*; Proceedings 16th ACM Symposium on Principles of Distributed Computing (PODC), pages 249-257, August 1997.		
	A Z	Kihlstrom, K. P. et al.; *Solving Consensus in a Byzantine Environment Using an Unreliable Fault Detector*; Proceedings of the International Conference on Principles of Distributed Systems (OPODIS'97), Hermes, Chantilly, France, 61–76, 1997.		

	B A	Kihlstrom, K. P. et al.; *The SecureRing Protocols for Securing Group Communication*; Proceedings of the 31st Hawaii International Conference on System Sciences, Vol. 3, pp. 317-326, Jan 1998.		
	B B	Malkhi, D. et al.; *Secure and Scalable Replication in Phalanx*; Proceedings of the 17th IEEE Symposium on Reliable Distributed Systems; p. 51-58, West Lafayette, Indiana, USA, Oct 1998.		
	B C	Malkhi, D. et al.; *Byzantine Quorum Systems*; Distributed Computing; Volume 11, number 4, p. 203–213, 1998.		
	B D	Goldberg, A. et al.; *Towards an Archival Intermemory*; International Forum on Research and Technology Advances in Digital Libraries; IEEE, pp. 147-156, 1998.		
	B E	Hartman, J.H. et al.; *The Swarm Scalable Storage System*; 19th ICDCS; pp. 74-81, 1999.		

Examiner Signature		Date Considered	

* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).